APPENDIX

MARKED UP VERSION OF AMENDMENTS

AS REQUIRED BY RULE 121

In The Specification:

On page 1, please replace the paragraph from lines 19 through 24 with:

--This patent application is a continuation-in-part of: U.S. Patent Application Serial No. 09/821,342, Attorney Docket No. SILA:072, titled "Partitioned Radio-Frequency Apparatus and Associated Methods," filed on March 29, 2001; and U.S. Patent Application Serial No. 09/708,339, Attorney Docket No. SILA:035C1, titled "Method and Apparatus for Operating a PLL with a Phase Detector/Sample Hold Circuit for Synthesizing High-Frequency Signals for Wireless Communications," filed on November 8, 2000, which is a continuation of U.S. Patent Application Serial No. 09/087,017, filed on May 29, 1998, now U.S. Patent 6,167,245.--

Please replace the paragraph beginning on page 1, line 26 and ending on page 2, line 7 with the following:

--Furthermore, this patent application claims priority to: Provisional U.S. Patent Application Serial No. 60/261,506, Attorney Docket No. SILA:072PZ1, filed on January 12, 2001; Provisional U.S. Patent Application Serial No. 60/273,119, Attorney Docket No. SILA:072PZ2, titled "Partitioned RF Apparatus with Digital Interface and Associated Methods," filed on March 2, 2001. This patent application also claims priority to, and incorporates by reference: Provisional U.S. Patent Application Serial No. 60/333,940, Attorney Docket No. SILA:074PZ1, titled "Apparatus and Methods for Generating Radio Frequencies in Communication Circuitry," filed on November 28, 2001; Provisional U.S. Patent Application Serial No. 60/339,819, Attorney Docket No. SILA:074PZ2, titled

"Radio-Frequency Communication Apparatus and Associated Methods," filed on December 13, 2001; U.S. Patent Application Serial No. [_____] 10/075,122, Attorney Docket No. SILA:078, titled "Digital Architecture for Radio-Frequency Apparatus and Associated Methods"; U.S. Patent Application Serial No. [_____] 10/075,099, Attorney Docket No. SILA:097, titled "Notch Filter for DC Offset Reduction in Radio-Frequency Apparatus and Associated Methods"; and U.S. Patent Application Serial No. [_____] 10/074,676, Attorney Docket No. SILA:098, titled "DC Offset Reduction in Radio-Frequency Apparatus and Associated Methods."--

On page 2, replace the paragraph from lines 9-14 with:

Furthermore, this patent application incorporates by reference the following patent documents: U.S. Patent Application Serial No. [_____] 10/075,094, Attorney Docket No. SILA:074, titled "Radio-Frequency Communication Apparatus and Associated Methods"; and U.S. Patent Application Serial No. [_____] 10/074,591, Attorney Docket No. SILA:096, titled "Apparatus for Generating Multiple Radio Frequencies in Communication Circuitry and Associated Methods."

In The Claims:

1. (Once Amended) A radio-frequency (RF) apparatus capable of transmitting radio-frequency signals, the radio-frequency apparatus comprising:

transmitter path circuitry, including:

a voltage-controlled oscillator circuitry, the voltage-controlled oscillator circuitry configured to generate an output signal having an adjustable frequency in response to first and second control signals ;

a first feedback circuitry, the first feedback circuitry being responsive to the output signal of the voltage-controlled oscillator circuitry, the first

feedback circuitry configured to provide the first control signal to the voltage-controlled oscillator circuitry; and

a second feedback circuitry, the second feedback circuitry being responsive to the output signal of the voltage-controlled oscillator circuitry, the second feedback circuitry configured to provide the second control signal to the voltage-controlled oscillator circuitry,

wherein the first control signal coarsely adjusts the frequency of the output signal of the voltage-controlled oscillator circuitry to a desired frequency, and

wherein the second control signal fine tunes the frequency of the output signal of the voltage-controlled oscillator circuitry to the desired frequency.

[2. A radio-frequency (RF) apparatus, comprising:

a first circuit partition, comprising receiver analog circuitry configured to produce a digital receive signal from an analog radio-frequency signal; and

a second circuit partition, comprising receiver digital circuitry configured to accept the digital receive signal, wherein the first and second circuit partitions are partitioned so that interference effects between the first circuit partition and the second circuit partition tend to be reduced.]

--3. (New) The radio-frequency (RF) apparatus according to claim 1, wherein the frequency of the output signal of the voltage-controlled oscillator is adjusted during a first adjustment phase, and wherein the frequency of the output signal of the voltage-controlled oscillator is fine tuned during a second adjustment phase.--

--4. (New) The radio-frequency (RF) apparatus according to claim 3, wherein the first adjustment phase occurs before the second adjustment phase.--

--5. (New) The radio-frequency (RF) apparatus according to claim 4, wherein the first feedback circuitry adjusts the frequency of the output signal of the voltage-controlled oscillator during the first adjustment phase, and wherein the second feedback circuitry adjusts the frequency of the output signal of the voltage-controlled oscillator during the second adjustment phase.--

--6. (New) The radio-frequency (RF) apparatus according to claim 5, wherein the first control signal comprises a plurality of digital signals.--

--7. (New) The radio-frequency (RF) apparatus according to claim 6, wherein the second control signal comprises an analog signal.--

--8. (New) The radio-frequency (RF) apparatus according to claim 7, wherein the second adjustment phase commences in response to a signal provided to the second feedback circuitry by the first feedback circuitry.--

--9. (New) The radio-frequency (RF) apparatus according to claim 8, wherein the first adjustment phase and the second adjustment phase occur before a transmit burst by the transmitter path circuitry.--

--10. (New) The radio-frequency (RF) apparatus according to claim 9, wherein the first feedback circuitry is further responsive to a reference signal.--

--11. (New) The radio-frequency (RF) apparatus according to claim 10, wherein the second feedback circuitry is further responsive to an intermediate-frequency signal.--

--12. (New) The radio-frequency (RF) apparatus according to claim 11, wherein the second feedback circuitry is further responsive to a radio-frequency local oscillator signal.--

--13. (New) An integrated circuit, comprising:

a voltage-controlled oscillator circuit coupled to a radio-frequency transmitter circuit within the integrated circuit, the voltage-controlled oscillator circuit including:

a continuously variable capacitor having a plurality of capacitor stages, the continuously variable capacitor having a capacitance that varies in response to an analog control signal; and

a discretely variable capacitor coupled in parallel with the continuously variable capacitor, the discretely variable capacitor having a capacitance that varies in response to a plurality of control signals; and

a feedback circuit coupled to the voltage-controlled oscillator circuit, the feedback circuit configured to supply the analog control signal and the plurality of control signals in response to an output signal of the voltage-controlled oscillator circuit,

wherein the radio-frequency transmitter circuit has an output signal derived from the output signal of the voltage-controlled oscillator circuit.--

--14. (New) The integrated circuit according to claim 13, wherein the continuously variable capacitor comprises a plurality of variable capacitors coupled in parallel.--

--15. (New) The integrated circuit according to claim 14, wherein a capacitance of each variable capacitor in the continuously variable capacitor varies in response to a plurality of signals derived from the analog control signal.--

--16. (New) The integrated circuit according to claim 15, wherein the discretely variable capacitor comprises a plurality of capacitor-switch combinations coupled in parallel, wherein each of the plurality of capacitor-switch combinations comprises a capacitor coupled in parallel with a switch.--

--17. (New) The integrated circuit according to claim 16, wherein each of the plurality of control signals controls a corresponding one of the switches in the plurality of capacitor-switch combinations.--

--18. (New) The integrated circuit according to claim 17, wherein the feedback circuit comprises a first feedback circuit and a second feedback circuit.--

--19. (New) The integrated circuit according to claim 18, wherein the first feedback circuit comprises a frequency calibration engine configured to supply the plurality of control signals.--

--20. (New) The integrated circuit according to claim 19, wherein the frequency calibration engine supplies the plurality of control signals in response to a reference signal and the output signal of the voltage-controlled oscillator circuit.--

--21. (New) The integrated circuit according to claim 20, wherein the second feedback circuit comprises a mixer, the mixer configured to provide a mixed signal derived from the output signal of the voltage-controlled oscillator circuit and a radio-frequency local oscillator signal.--

--22. (New) The integrated circuit according to claim 21, wherein the second feedback circuit further comprises a phase detector circuit, the phase detector circuit configured to

provide an error signal derived from the mixed signal and an intermediate-frequency signal.--

--23. (New) The integrated circuit according to claim 22, wherein the second feedback circuit further comprises a filter circuit, the filter circuit configured to supply the analog control signal in response to the error signal.--

--24. (New) The integrated circuit according to claim 23, further comprising receiver circuitry configured to receive a radio-frequency input signal.--

--25. (New) The integrated circuit according to claim 24, wherein the receiver circuitry couples to signal processing circuitry within a second integrated circuit.--

--26. (New) The integrated circuit according to claim 25, wherein the receiver circuitry comprises low intermediate-frequency receiver circuitry.--

--27. (New) A method of generating radio-frequency (RF) signals in an apparatus capable of transmitting radio-frequency signals, comprising:

generating with a controlled oscillator circuitry an output signal having a frequency that is adjustable in response to first and second control signals;

generating the first control signal in response to the output signal of the controlled oscillator circuitry;

adjusting coarsely the frequency of the output signal of the controlled oscillator circuitry to a desired frequency in response to the first control signal;

generating the second control signal in response to the output signal of the controlled oscillator circuitry; and

fine tuning the frequency of the output signal of the controlled oscillator circuitry to the desired frequency in response to the second control signal.--

--28. (New) The method according to claim 27, further comprising:

adjusting the frequency of the output signal of the controlled oscillator during a first adjustment phase; and

fine tuning the frequency of the output signal of the controlled oscillator circuitry during a second adjustment phase.--

--29. (New) The method according to claim 28, further comprising performing the first adjustment phase before the second adjustment phase.--

--30. (New) The method according to claim 29, further comprising:

using the first control signal to adjust coarsely the frequency of the output signal of the controlled oscillator circuitry during the first adjustment phase; and

using the second control signal to fine tune the frequency of the output signal of the controlled oscillator during the second adjustment phase.--

--31. (New) The method according to claim 30, wherein the first control signal comprises a plurality of digital signals.--

--32. (New) The method according to claim 31, wherein the second control signal comprises an analog signal.--

--33. (New) The method according to claim 32, further comprising:

performing the first adjustment phase;

performing the second adjustment phase; and

starting a transmit burst.--

--34. (New) The method according to claim 33, wherein generating the first control signal further comprises using a reference signal to derive the first control signal.--

--35. (New) The method according to claim 34, wherein generating the second control signal further comprises using a radio-frequency local oscillator signal to derive the second control signal.--

--36. (New) The method according to claim 35, wherein generating the second control signal further comprises using an intermediate-frequency signal to derive the second control.--